GEOGRAPHIC NEWS BULLETIN

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General Headquarters, Washington, D. C.

CONTENTS FOR WEEK OF OCTOBER 13, 1924. Vol. III. No. 12

1. Geography of the Electoral College.
2. Mars and Man's Seven League Eye.
3. How Does Commerce Use the Panama Canal?
4. Er Rif: Abandoned to the Moors By Spain.
5. Shanghai, Prize of China's Civil Strife.

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A CHINESE SIX-PASSENGER CAR

HOW TO OBTAIN THE BULLETIN

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Geography of the Electoral College

CHOOSING a president brings into the limelight the history of the electoral college, a practice of the medieval Holy Roman Empire and Maryland's contribution to the Constitution.

Red wine, roast pork, chicken, pigeon, goose, rabbit, cakes and sweetmeats were part of the business of the electoral college in its earliest, lusty, German youth. Nothing as plain as a curtained closet would do for a Rhenish craftsman engaged in choosing an executive. He developed the "college" out of well-dined sessions of medieval "Rotary" clubs in such trade centers as Cologne, and Mainz along the Rhine.

Feasted and Voted While Crowd Waited

The appearance of organized towns in Central Europe following the leavening influence of the Crusades, set the stage for a battle. That new figure, the merchant, began to refuse obedience to the extravagant, fighting princelings. With the aid of leaders of medieval unions or gilds, the merchants won freedom for their towns. To select the town officers peaceably gilds and merchants sent electors to an election dinner party. Under the heart-warming influence of much spiced food officials were elected and announced to the crowd which gathered then as election crowds gather today. Election day was a holiday.

Out of town "Rotary" club elections grew the Imperial Electoral College which proclaimed the ruler of the Holy Roman Empire. At Mainz, and later at Frankfort, the bishops of Cologne and Mainz and a few nobles of larger German states met after the death of an emperor to elect his successor. Maryland's electoral college and the present American electoral college are direct descendants of this Holy Roman Empire institution.

Now Electors Never Meet

The electoral college for which millions of citizens will vote in November, will never meet. In each of the forty-eight states certain little groups will gather and mail an envelope to Washington. The contents of this envelope will be counted by two tellers of the House of Representatives and read by the President of the Senate and the members of the electoral college will have been graduated until another four years.

France has a $100,000,000 convention hall for its electoral college. This auditorium, which cost the Reign of Terror, was surprised in the midst of its regular seven-year sleep a few months ago, when the august senators and the spirited deputies trouped out twelve miles from Paris to elect M. Doumergue president of France.

Versailles, whose mirrors have reflected world moving events from the machinations of Madame de Maintenon to the signing of the World War treaty in 1918, is not generally known to be the official capital of France. Its electoral college duties are the only remaining shadows of this function.

Picking Premiers in Pall Mall

Although the Senate and Chamber of Deputies of France convene in Paris now, they must meet jointly at Versailles to elect a president. This officer ordinarily

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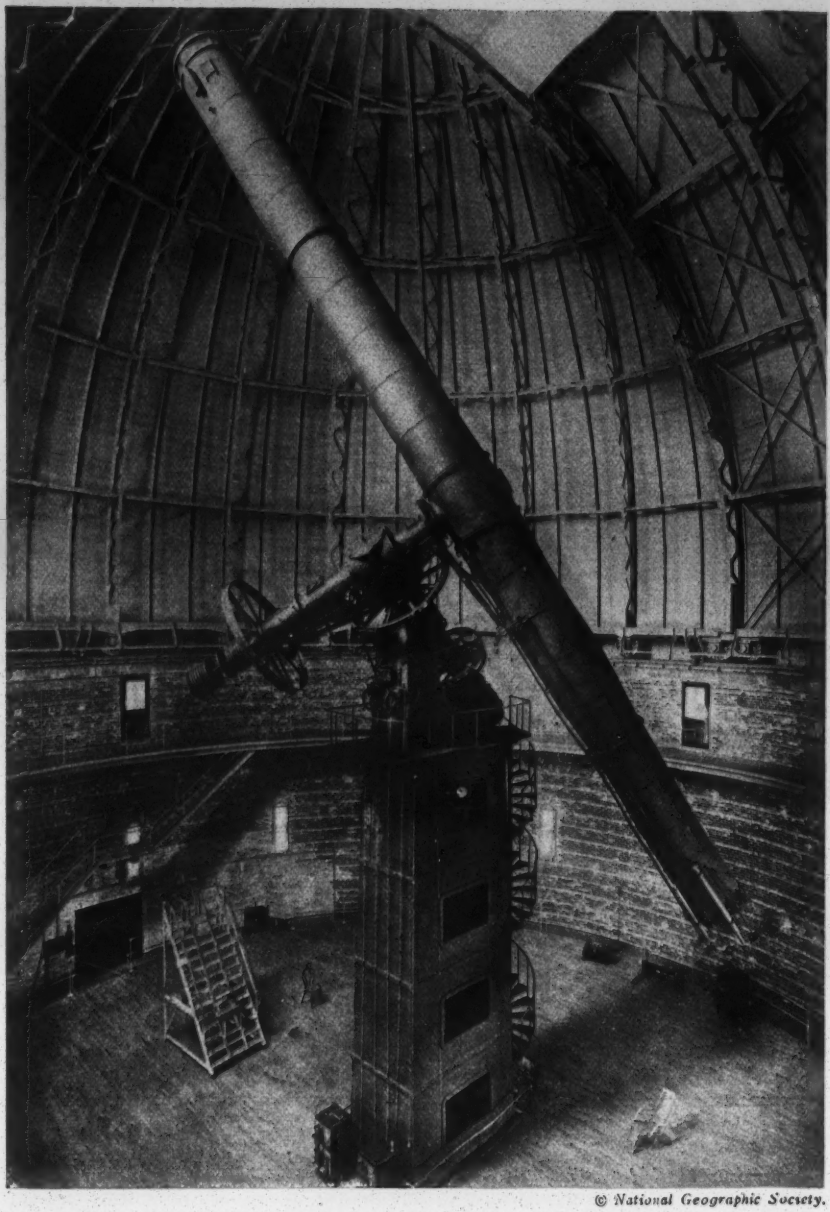

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THE LARGEST REFRACTING INSTRUMENT IN THE WORLD: THE YERKES 40-INCH TELESCOPE

This "big gun" of the astronomical world is a giant eye, 40,000 times as powerful as the human optic. A human eye to be as powerful as it is would have to be 25 feet in diameter, and the man who could possess such an eye would have to be 1,200 feet high. (See bulletin No. 2.)

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Mars and Man's Seven League Eye

WITH Mars' recent approach to the earth, closer by millions of miles than it has been since 1909, and closer by thousands of miles than it will be for about 120 years, the planet was bombarded by hundreds of pairs of trained human eyes peering through the world's greatest telescopes. How strong these instruments are is shown by their ability to catch the image of the moon, our nearest neighbor in space.

Brings Moon Within 50 Miles

The largest telescope in existence, the 101-inch instrument at Mt. Wilson observatory, California, in effect brings the moon within 50 miles of the earth. Even relatively minor details of the moon's surface can be made out, and the height of hills and mountains can be calculated with fair accuracy. Major features are so easily recognized that many mountains on the moon have been named. If a wreck the size of the ill-fated Titanic lay on the bottom of one of the dry moon oceans beds it would be visible through the Mt. Wilson instrument. Observations through this great telescope further emphasize what smaller instruments had proved; that the moon is a dry, atmosphereless world, from which all life has long since departed. The present condition of the moon, so plainly shown by the big telescopes, forecasts what probably will happen to the earth, unless a collision with another celestial body should substitute a sudden end for a lingering death.

When powerful telescopes are turned from the earth's small satellite to its great sun their disclosures are no less enlightening. They show that from the sun the earth would appear as small as a period on a printed page. So tremendous are some of the chasms in the sun's surface which we call "sun spots" that 25 or more globes the size of the earth would be required to fill them.

Two Years to Photograph a Star

Among other wonders which the great, modern telescopes make known are swarms of myriads of stars where the unaided eye can see but five or six hazy nebulae which seem mere wisps of radiant gas and which are solar systems in the making, and stars so far away that it requires 30,000 years for their light to reach the earth. The light of some of these stars is so faint that two years must be spent in photographing them. In some of the nebulae are what appear to be great holes, seemingly devoid of any matter.

Modern astronomical telescopes have not definitely answered the question on which men's minds have long dwelt: "Are other planets inhabited?" They have piled up additional facts in regard to these planets, however, which lead many of the foremost astronomers to believe that none of the other planets of our solar system is inhabited with the possible exception of Venus and Mars.

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lives for seven years in the Palais de l'Elysée and performs duties similar to those of the British King; he speaks at patriotic gatherings, unveils monuments and calls in new premiers to replace defeated executives. Millerand, under pressure of the French legislature, resigned before his term ended. That is why the $100,000,000 home of Louis XIV, a glorious monument to monarchy unchecked, awoke out of its seven-year sleep to find a heavy guard thrown about its marble court while French legislators rolled up to the south wing in automobiles.

Cologne's early Rathaus where burghers dined and voted, finds a counterpart today in some of London's famous political clubs. Many English premiers are elected in the Carlton Club and similar institutions on Pall Mall under the shadow of Buckingham palace and a few blocks from the Parliament buildings. Selection by the King is merely an approval of a decision by leaders made in a leading "conservative" or "liberal" or "labor" club.

Difficulties of American parties in selecting candidates for presidential elections fade against deadlocks in the electoral college of cardinals at Rome. Undue delays led early to the present custom of forced seclusion during the voting for a Pope. The cardinals' income was put off during the conclave, they were allowed one servant apiece, and they lived a common life without separate cells. Their food was passed through a guarded window. It consisted of only one dish after the first three days and bread and water after the fifth. When these measures brought no result in 1268, the roof of the episcopal palace was taken off; and the cardinals seem to have camped under the sky for nearly three years before they chose a pontiff.

Bulletin No. 1, October 13, 1924.

NOTICE TO TEACHERS

It will facilitate greatly our handling of the Geographic News Bulletin mailing list if school officials and teachers will mail us requests for the Bulletins as early as possible in the school year.

Educators who now receive the Bulletins can cooperate with the National Geographic Society if they make this request known to their associates through notices or by announcements.

The demand for back copies from those who do not request their bulletins until later in the year always is heavy and usually these cannot be supplied.

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How Does Commerce Use the Panama Canal?

PANAMA Canal is celebrating its tenth birthday by passing the middle-aged Suez Canal in amount of cargo carried and is now the world's greatest artificial inter-oceanic waterway.

The Panama Canal's birthday achievement gives United States the proprietorship of the two busiest canals in the world, the Panama and the Sault Ste. Marie. The latter still handles twice as much traffic as the Panama Canal although it is open only eight months of the year.

Panama Canal's ten-year record reads like the story of the traditional American boy, rising from poverty to wealth. It is a record of financial success beyond the dreams of many of its staunchest adherents; it is a record of service success; it is a triumph of sanitation; it is, as Viscount Bryce predicted, "the greatest engineering achievement of history or of prospect."

In 1923 canal tolls totaled more than $17,000,000 against expenses of $4,317,000, a net profit equal to more than 3.5 per cent of the construction cost of the canal, $375,000,000. In 1923 nearly 4,000 vessels passed from ocean to ocean. But the fiscal year of 1924 far outstripped 1923. Of the 107,000,000 cargo tons transferred in the decade, more than one-fourth is credited to 1924 and the tolls rose to $24,290,000. Expenditure figures are not yet available.

New Tract to Ward Off Canal Thirst

President Coolidge recently gave the deserving Panama Canal a birthday present; an executive order putting aside 22 square miles of additional country for the Canal Zone. This acquisition will be converted into a large reservoir to save up the Chagres floods which would otherwise go over the Gatun Dam spillway. It is estimated that this new reservoir will store up a supply of water sufficient to meet demands until 1955 based on a normal growth of trade.

The new Alhajuela project will further increase the size of Gatun Lake which is already the largest artificial body of water in the world. Its present area, 165 square miles, is one-third the size of Lake Champlain.

Ever since the Panama Canal was proposed predictions of its great boon to trade have filled the press. Ten years show what the canal is good for. At present oil is king at Panama. The tonnage of oils, chiefly crude and refined petroleum, passing through from the Pacific to Atlantic exceeds the total of all other products. In the opposite direction oils stand second only to iron and steel.

East Meets West at Panama

From the United States industrial cast iron and steel come and also thousands of tons of other manufactured products and textiles, bound for South America, Australia, and the Far East. From there also come, at the rate of more than 100,000 tons in one year, ammonia, cotton, sulphur, cement, coal and coke, metals, ores and paper.

In the United States the great argument for the Panama Canal, after its necessity for defense, was its advantage to coastwise traffic. Ten years show that

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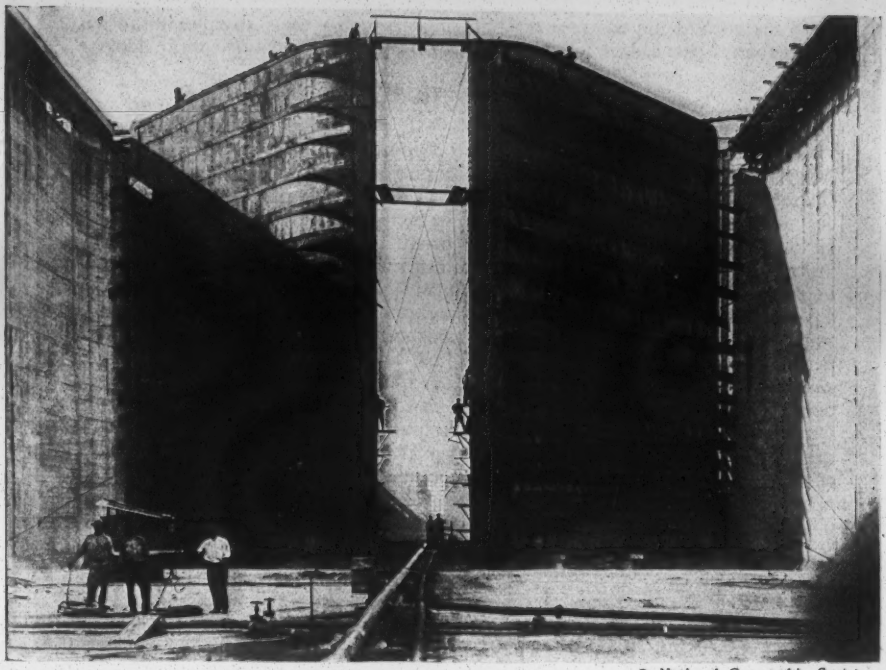

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LOCK GATES AT PANAMA

The lock gates are an interesting feature of the canal. There are 46 of them, each having two leaves, and their total weight amounts to 58,000 tons. They vary in size from 47 to 82 feet high and it took 6,000,000 rivets to put them together. Some idea of their enormous size can be gained by comparing the men working on them with the gates themselves. (See bulletin No. 4.)

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Er Rif Abandoned Temporarily to the Moors

PREMIER RIVERA recently announced that Spain is temporarily abandoning Er Rif, the interior mountain district of her African colony just across the Strait of Gibraltar. The head of the military directorate of Spain has gone to Morocco where he is reported to be in charge of the Spanish forces stemming the advances of Moorish mountain tribes whose ancestors were driven out of Spain in the days of Columbus.

Being deprived of the right to expect protection from the "fatherland" is not calculated to bring to the Berber inhabitants of Er Rif the usual grief civilization associates with such a loss, because they insist on self-protection more than Spanish administration.

Spanish Zone Smaller Than Vermont

Er Rif starts with the southernmost of the Pillars of Hercules, the ancients' name for the Mediterranean's gateway to the Atlantic. Gibraltar, sentry box for Britannia, is the northern pillar. From the northwest tip of Africa, Er Rif swings down the Mediterranean coast, thus embracing nearly the whole length of the Spanish Zone in Morocco. Its eastern end creeps into French Morocco.

To Spain Er Rif is much more than a mountain chain with soft blue shadows in its gorges; it means hills where the nation has sunk millions of its treasury's gold with little prospect that it ever shall be dug out again. It means a place where thousands of Spanish soldiers have met death and many Spanish armies have met defeat.

Although Spain has held Ceuta, companion town to Gibraltar, since the time of the conquests of Pizarro and Cortez in America, it did not attempt to extend its dominion over the interior until the middle of the last century when Europe began to partition Africa. Tetuan is 26 miles from Ceuta but until 1859 it was spiritually as far away as Cape Town and a Spaniard had as good chance of life going overland to Cape Town as to Tetuan. In that year a Spanish army, under the direction of an O'Donnell, took 36 days to go the 26 miles. The Spanish Zone of Morocco is smaller than Vermont. It has been the "enfant terrible" of Spain.

Peopled By Moors and Berbers

The Moors of the Spanish Zone are descendants of those Arabs who flowed into Spain and ruled from Granada. Reminders of their Spanish conquest are often found in such un-Arabic names as Garcia, Aragon, Morales. With them in the mountain fastnesses are the Berbers who are the original native stock. Their blood is said to account for the blue eyes and white skin which often surprise a visitor to Morocco. Impoverished and suppressed by these races are the Jews, most of them descendants of Jews who fled to Africa during the Spanish Inquisition.

In Moorish and Berber towns the Jews are compelled to live by themselves in a quarter often walled, called the Mellah. Their way is hard. Before Spain controlled the interior a Frenchman disguised himself as a Jew and made his way to Sheshauen, near the French border. He said that he never passed a Moslem

the "Big Ditch" fulfills these expectations. Two-thirds of eastbound tonnage from all sources is coastwise traffic. Of the tonnage originating in west coast states, 90 per cent is consigned to east coast ports. Half of the shipments from the industrial east, totaling one-third of all westbound traffic, is coastal traffic. California sends millions of barrels of oil east via the canal. Much of her fruit in cold storage moves this way and from the northern part of the coast comes the famous salmon. Lumber is a commodity of rapidly increasing importance in canal business, the east coast exchanging its particular types of wood for the west coast's native trees. Wheat from western Canada, instead of flowing to Europe by the lakes and rivers of the St. Lawrence system, goes to Vancouver now and is shipped to England via Colon.

From Tankers of Blood to French Perfume

All the odors, scents and smells rising from a crowded Far East port cannot match those at Panama. Tankers with blood from South America, camphor from Japan, algarobilla from Andes forests, garlic, hair, cassia and whale oils from the Far East, iodine from Chile, perfume from France, onions from California, peanuts and tea from China, rubber from Singapore, copra from the South Seas, and pungent ammonia from Baltimore, all mix at Panama. But probably no port in Araby dissipates its stenches and its scents in sanitary oxygen and antiseptic sunshine as Panama does. The Canal Zone, from Panama City on the Pacific to Cristobal and Colon on the Caribbean, is as spotless and well swept as a Dutch kitchen.

In ten years more than 25,000 ships have transited the canal. These ships paid for this privilege $97,802,000; a sum equal to more than one-fourth the total construction cost. An average of 14 vessels a day now passes through the canal and each day the United States collects about $65,000 tolls. That the tendency of trade is to bring raw products east and send manufactured products back is shown in part by the fact that in the decade the tonnage from the Pacific to the Atlantic exceeded that going in the other direction by more than 20,000,000.

The service of the canal's early apprenticeship to Mars, that of handling precious nitrates from Chile to make powder for the Allies, is still an important duty. Nitrates are the most important product received by the canal from all west coast South America. During the war, it is said, a chain of battleships guarded the nitrate route from Chile to England constantly. Today the Panama Canal has beaten its swords into plowshares for the nitrates it carried for cannon now serve loyally in the farmers' fields.

Bulletin No. 3, October 13, 1924.

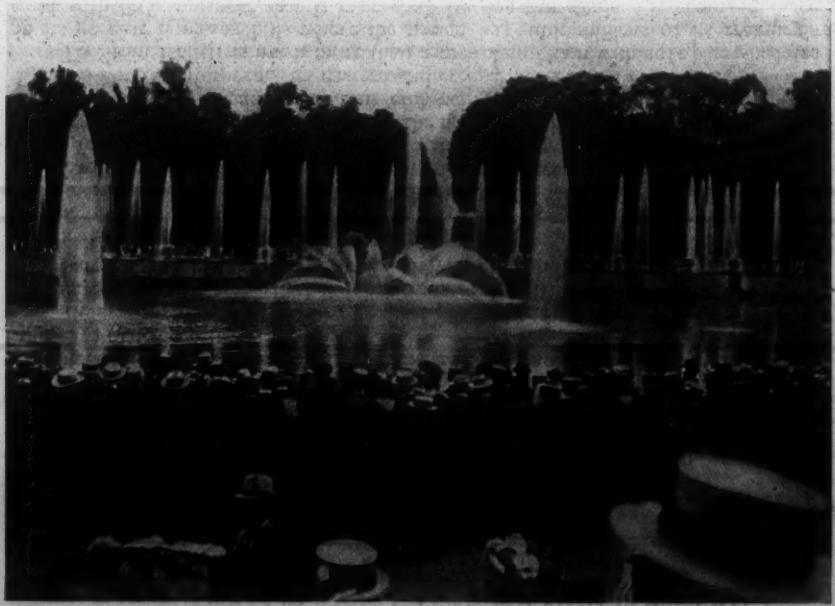
who did not say, "May God burn in the Eternal fires of Hell the Father who begat you, Oh Jew." But the Jews thrive and when the Spanish come they often prosper.

Home of Famous Bandit

Raisuli, one of the best press-agented bandits of the past generation, was one of the leaders of the western mountain region of the Spanish Zone. He died this year. Raisuli flourished near Tangier, in the vicinity of which he captured the American, Perdicaris, whose ransom constituted an international incident still remembered. Division among the mountain people should have made it easy for Spain to conquer her colony once for all since Raisuli, a leader in the west, could not agree with the educated Abdul Krim el Khattabi, dominant chieftain in Er Rif. It is the latter who is believed to have brought the tribesmen into unity of action as well as spirit to drive Spain back.

All this smacks of the Afghan border, the days when the Iroquois threatened to wipe out the white man's settlements in America, or the head hunters of Formosa who will not make peace with civilization. Yet nearly the whole tiny stage of the Moroccan drama can be seen from the decks of a sumptuously appointed tourist liner in Mediterranean service, for the Spanish Zone averages only 60 miles in width.

Bulletin No. 4, October 13, 1924.



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FOUNTAINS AT VERSAILLES, THE FRENCH ELECTORAL COLLEGE

The leveling of the ground for the garden and park of the palace at Versailles, the making of a road to Paris (11 miles distant), and the erection of the Aqueduc de Maintenon to bring water for the fountains from the River Eure are said to have occupied 36,000 men and 6,000 horses for years, while the palace itself cost in the neighborhood of $100,000,000 in addition to the forced labor exacted under the old feudal system. The fountains at Versailles only play on the first Sunday of each month from May to October and on special fete days. (See Bulletin No. 1.)